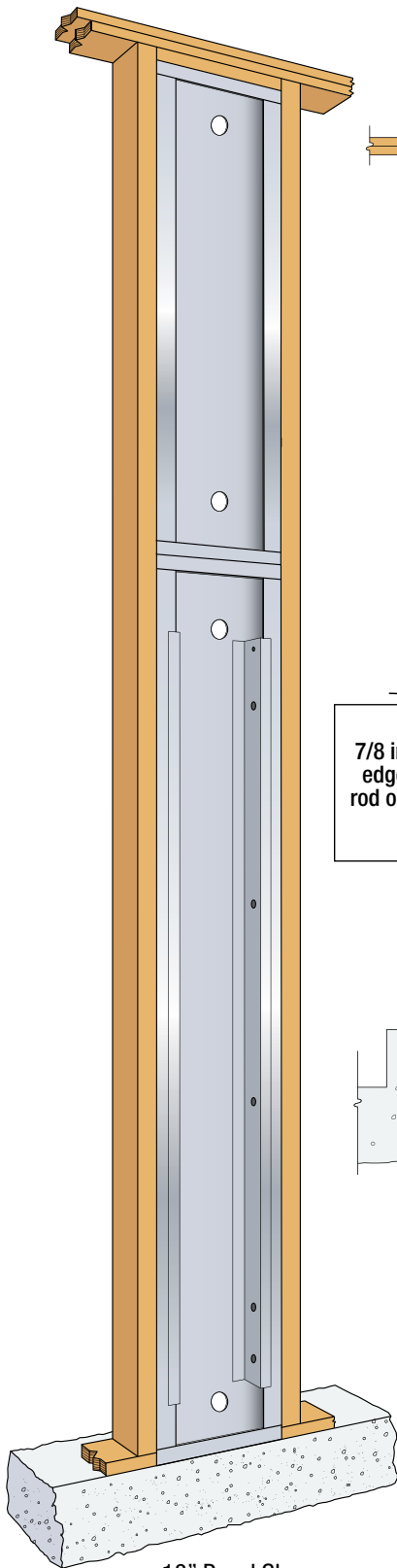
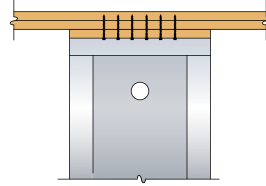


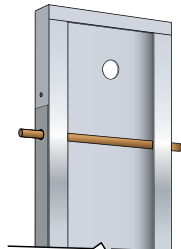
Panels in Balloon Wall Application



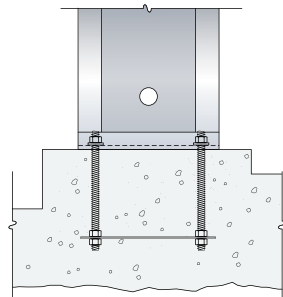
18" Panel Shown



Hardy Frame® Panel with 2x filler
1/4 x 4 1/2" screws



Installer!
7/8 in. diameter holes at Panel edge may be used to insert a rod or dowel "handle" for lifting Panel

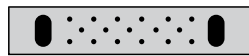


Hardy Frame® Panel on concrete

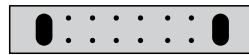
- Pre-assembled one piece unit
- Tested to meet AC322 criteria
- Available in 18 and 24 inch widths
- Nominal heights from 14' to 20'
- Custom heights up to 20' available
- Cost effective
- Residential applications
- Commercial applications

Recommended Installation

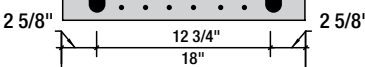
- Cast two high strength hold down bolts into concrete with bolt extending 2 3/4" above top of finished floor/ concrete
- Stand wood frame wall without Panel
- Install Panel directly on concrete and secure the two HD bolts
- Place a 2x filler above the top of Panel and install 1/4" x 4 1/2" inch screws (per table) through the top channel upward with penetration into the upper top plate
- Connection through the screw holes provided in flanges to adjacent framing members is required.



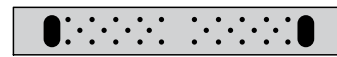
Hole Pattern Top



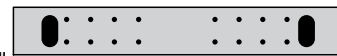
Hole Pattern Bottom



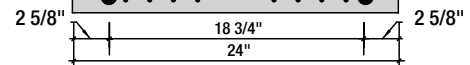
18" Hardy Frame® HFX-Series Panel



Hole Pattern Top



Hole Pattern Bottom



24" Hardy Frame® HFX-Series Panel

Connect to foundation with 1-1/8 HS hold downs

Hardy Frame® HFX-Series Balloon Panel Allowable Capacities on Foundations^{1,9,10}

Model Number	Hold Down Bolt Dia.& Grade ¹¹	Net Height	Seismic Load ³ R=6.5			Wind Load			Screw Qty. at Top ^{5,6}	Add'l Vertical Load P ^{7,8} (lbs)
			Allowable In-Plane Shear V ² (lbs)	Drift at V ⁴ (in)	Uplift at V ⁴ (lbs)	Allowable In-Plane Shear V ² (lbs)	Drift at V ⁴ (in)	Uplift at V ⁴ (lbs)		
HFX-18x14	1 1/8" HS	164 1/4"	1,380	0.642	14,720	1,960	0.913	20,925	10	4,000
HFX-18x15		176 1/4"	1,310	0.701	15,005	1,830	0.979	20,965		3,500
HFX-18x16		188 1/4"	1,250	0.761	15,290	1,715	1.046	21,005		3,000
HFX-18x17		200 1/4"	1,195	0.824	15,575	1,615	1.113	21,035		2,500
HFX-18x18		212 1/4"	1,150	0.887	15,855	1,525	1.179	21,065		2,000
HFX-18x19		224 1/4"	1,105	0.953	16,130	1,445	1.246	21,090		2,000
HFX-18x20		236 1/4"	1,070	1.020	16,410	1,220	1.166	18,860		2,000
HFX-24x14	1 1/8" HS	164 1/4"	2,090	0.527	16,050	3,615	0.913	27,770	14	4,000
HFX-24x15		176 1/4"	1,960	0.597	16,180	3,220	0.979	26,545		3,500
HFX-24x16		188 1/4"	1,825	0.625	16,075	3,055	1.046	26,895		3,000
HFX-24x17		200 1/4"	1,695	0.660	15,875	2,855	1.113	26,750		2,500
HFX-24x18		212 1/4"	1,595	0.697	15,835	2,700	1.179	26,795		2,000
HFX-24x19		224 1/4"	1,515	0.734	15,920	2,575	1.246	27,030		2,000
HFX-24x20		236 1/4"	1,460	0.770	16,115	2,485	1.313	27,460		2,000

For SI: 1 inch = 25.4 mm, 1 lbf = 4.45 N

Custom Heights available up to the maximum height listed in this Table.

MODEL NUMBER

HFX-24 x 20

NOMINAL HEIGHT
ACTUAL WIDTH
PRODUCT SERIES

HD DIA AND GRADE

1 1/8 HS

ROD GRADE
ROD DIAMETER

**REMINDER: SPECIFY CALLOUT AS
1 1/8 HS ON FOUNDATION PLAN**

- 1 Installation on Foundations includes concrete, masonry, or nut & washer with 5,000 psi minimum compressive strength non-shrink grout.
- 2 Loads shown are for Allowable Stress Design (ASD) and without a 1.33 stress increase.
- 3 For seismic loads under the 2003 or 2006 IBC the use of R=6.5, $\Omega_0 = 3$, and $C_d = 4.0$ apply.
- 4 The Uplift and Drift values listed are those corresponding to the allowable Shear V. For reduced Shear loads the Uplift and Drift may be proportionately reduced.
- 5 The 1/4" diameter by 3" long wood screws must have a minimum allowable design value of 311 lbs (excluding any duration of load stress increase) based on metal (No. 12 gage) to wood (Specific gravity of 0.50 or greater) connection. Complying screws are Hardy Frame® HFS-series or equal.
- 6 When installing a 2 by wood filler with a specific gravity of 0.50 or greater at the top connection, the minimum screw length is 4 1/2".
- 7 The additional vertical load P is concurrent with the allowable in-plane Shear load.
- 8 Load P indicates the maximum allowable concentrated load that may be applied within the middle 1/3 of the Panel width or that may be uniformly distributed across the entire Panel width.
- 9 This table is not in the January 2009 version of ICC-ESR 2089.
- 10 Full height 2x6 structural members required adjacent to Panels. These members are to be attached with 1/4" x 1 1/2" screws through all predrilled screw holes provided at the edges of the Panel.
- 11 See Embed Table for anchorage dimensions. HS Hold Down Bolts must comply with a high strength steel specification and have an adequate ASD capacity to resist the tabulated uplift values. High strength rods include but are not limited to ASTM F 1554 Grade 105, ASTM A193 Grade B7, ASTM A 354 Grade BD.